

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>F-1148</b>	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. <b>PCT/JP2004/007515</b>	International filing date (day/month/year) <b>01.06.2004</b>	Priority date (day/month/year) <b>09.06.2003</b>
International Patent Classification (IPC) or national classification and IPC		
Applicant <b>JSR CORPORATION</b>		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>2</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))</p> <p>_____ , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
  - ☐ publication of the international application (Rule 12.4)
  - ☐ international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- ☐ the international application as originally filed/furnished
- ☒ the description:

pages 1-43 as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

- ☒ the claims:

nos. 2-10 as originally filed/furnished

nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19

nos.\* 1 received by this Authority on 07.04.2005

nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

- ☒ the drawings:

sheets fig. 1-18 as originally filed/furnished

sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages \_\_\_\_\_

☐ the claims, nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-10	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-10	NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
<p>Document 1: JP 2002-246428 A (JSR Corp.), 30 August 2002, entire text, all drawings &amp; WO 2002/047149 A1</p> <p>Document 2: JP 2003-077962 A (JSR Corp.), 14 March 2003, paragraphs [0039] to [0041] and [0077], and fig. 15 to 19 (Family: none)</p> <p>The inventions set forth in claims 1 to 10 do not involve an inventive step in the light of documents 1 to 2.</p> <p>(1) Claims 1 to 3 and 8 to 10</p> <p>Document 1 discloses inventions that are related to an anisotropic conductive connector for electrically connecting the various inspection electrodes and the various terminal electrodes, which is disposed between the inspecting circuit board and the connecting circuit board, wherein said anisotropic conductive connector is configured from an elastic anisotropic conduction film, which comprises a plurality of connecting conduction units that extend in the thickness direction at positions that are separated from one another along the surface direction and an insulation unit that is formed between</p>			

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

the connecting conduction units, and an insulation sheet member, which supports the elastic anisotropic conduction film in question; the aforementioned insulation sheet material is configured from a material that has a linear thermal expansion coefficient of  $3 \times 10^{-6}$  to  $3 \times 10^{-5} \text{ K}^{-1}$ ; the connecting conduction units of the aforementioned elastic anisotropic conduction film are configured by densely filling magnetic conductive particles with a number average particle diameter of 30 to 150  $\mu\text{m}$  into an elastic polymer substance; said conductive particles have a coating layer of a noble metal with a thickness of 20 nm or more formed upon the surface thereof; said connecting conduction units have a durometer hardness of 15 to 45; and the electrical resistance between adjacent connecting conduction units is 10 M $\Omega$  or more.

Document 2 discloses an anisotropic conductive connector that is configured from an elastic anisotropic conduction film and a frame plate for supporting the elastic anisotropic conduction film, wherein said frame plate is configured from a metal material.

The anisotropic conductive connector that is disclosed in document 1 and the anisotropic conductive connector that is disclosed in document 2 are both related to a common issue, i.e. controlling the thermal expansion of the anisotropic conductive connector in order to stably maintain a favorable electrical connection state; therefore, it would have been easy for a person skilled in the art to conceive of substituting the frame plate that is configured from a metal material, which is disclosed in document 2, for the insulating sheet in the anisotropic conductive sheet that is disclosed in document 1.

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

In addition, configuring so that the linear thermal expansion coefficient of the frame plate, the number average particle diameter of the conductive particles and the durometer hardness of the connecting conduction units are  $3 \times 10^{-6}$  to  $2 \times 10^{-5} \text{ K}^{-1}$ , 20 to 80  $\mu\text{m}$  and 10 to 35, respectively, is merely a design matter, and there cannot be found to be any significant action or effect that results from selecting the numerical ranges in question.

(2) Claims 4 to 7

Configuring so that the conditions for carrying out tests upon the anisotropic conductive sheet which are disclosed in claims 3 to 6 of document 1 conform to the numerical ranges that are set forth in claims 4 to 7 of the present application is merely a design matter. The conditions for carrying out tests upon the anisotropic conductive sheet should be set so as to match actual usage conditions, as appropriate, and there cannot be found to be any significant action or effect that results from selecting the numerical ranges that are set forth in claims 4 to 7 of the present application.